

CLAIMS

What is claimed is:

- 1 2. A method of determining at least one candidate patch for human
2 faces in a color graphic image, comprising:
3 determining a first area wherein a color gradient has a low value;
4 determining a second area wherein an intensity value has a high value;
5 performing a logical AND on said first area and said second area to
6 create a third area; and
7 selecting portions of said third area with suitable hue saturation to form
8 said at least one candidate patch.
- 1 2. The method of claim 1, wherein said determining said first area
2 uses a first threshold value comparison.
- 1 3. The method of claim 2, wherein said first threshold value is
2 determined by normalization.
- 1 4. The method of claim 1, wherein said determining said second area
2 uses a second threshold value comparison.
- 1 5. The method of claim 4, wherein said second threshold is
2 determined by normalization.
- 1 6. The method of claim 1, further comprising eroding said third area.
- 1 7. The method of claim 6, wherein said eroding is morphological.

002090-08655560

1 8. The method of claim 1, further comprising fitting an ellipse to one
2 of said at least one candidate patch.

1 9. The method of claim 8, further comprising determining if said
2 ellipse is a bad fit to said one of said at least one candidate patch.

1 10. The method of claim 9, further processing said one of said at least
2 one candidate patch when said ellipse is a bad fit.

1 11. The method of claim 10, further comprising determining if said one
2 of said at least one candidate patch is too smooth.

1 12. A system configured to determine at least one location of a
2 human face in a color graphic image, comprising:
3 a color gradient map configured to indicate true where a color gradient
4 has a low value;
5 an intensity map configured to indicate true where an intensity value has
6 a high value;
7 a combined map configured to indicate true where said color gradient
8 map is true and said intensity map is true; and
9 at least one candidate patch selected from said combined map, wherein
10 said candidate patches each have suitable hue saturation.

1 13. The system of claim 12, wherein said color gradient map includes a
2 first threshold.

1 23. A machine-readable medium having stored thereon instructions for
2 processing elements, which when executed by said processing elements
3 perform the following:

4 determining a first area wherein a color gradient has a low value;

5 determining a second area wherein an intensity value has a high value;

6 performing a logical AND on said first area and said second area to

7 create a third area; and

8 selecting portions of said third area with suitable hue saturation to form

9 at least one candidate patch.

ADD
DI

002090-0855560